artdaq - Support #19517

artdaqDriver splits output data into two files; not sure why

03/28/2018 10:33 AM - Kurt Biery

Status: Closed Start date: 03/28/2018

Priority: Low Due date:

Assignee: Eric Flumerfelt % Done: 0%

Category: Known Issues Estimated time: 0.00 hour

Target version: artdaq v3_01_00

Experiment: - Co-Assignees:

Description

To help with testing disk rate performance, we have created artdaq-demo/tools/fcl/DemoDriverNoDisk.fcl and DemoDriverWithDisk.fcl. These can be run from an artdaq-demo installation using 'artdaqDriver -c <path>/DemoDriverNoDisk.fcl' after running setupARTDAQDEMO.

To test artdaq-v3-related changes to scripts, I tested them on mu2edaq01. Admittedly, this computer does not have very fast disks, and the "WithDisk" test takes noticeably longer than the "NoDisk" one.

Eric has already made changes to SharedMemoryEventManager to allow the draining of the pipeline in cases like the WithDisk test in which the rate of creation of events is much higher than the rate of writing them out.

Something that I noticed is that there are two data files created by the current version of DemoDriverWithDisk.fcl. 90 of the requested 100 events go into the first file, and 10 of them go into the second file. The SMEM buffer count is set to 10, and I wonder if those two values of 10 are correlated.

This is not a high priority, but it is probably worth investigating in case this behavior gives us some insight into the running of full artdaq systems.

History

#1 - 04/17/2018 11:20 AM - Eric Flumerfelt

- Category set to Known Issues
- Status changed from Assigned to Closed
- Target version set to artdaq v3_01_00

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